

## AMENDMENTS TO THE CLAIMS

Claims 1-6 (Cancelled):

Claim 7 (Currently Amended):

2           The method as recited in claim 1, further comprising the method steps of A  
         method for matching output impedance of a driver to a load impedance,  
         comprising:

4           attaching an external impedance between an external contact and a first source  
6           potential, wherein the load impedance comprises the external impedance plus  
         impedance of interconnections between an output terminal of the driver and the  
8           external impedance;

10          attaching an adjustable impedance between a second source potential and the  
         output terminal of the driver;

12          obtaining a reference potential, wherein the reference potential has a value half-  
14          way between the first source potential and the second source potential;

16          obtaining a load matching impedance by changing the adjustable impedance until  
         the absolute value of the difference between voltage of the output terminal of the  
18          driver and the reference potential is less than a preselected value;

20          repeating the method obtaining the load matching impedance for a preselected  
         number of conducting traces, wherein the conducting traces have different length  
22          to width ratios;

24          based on the conducting trace length to width ratio of an additional driver,  
         selecting the load matching impedance which provides the closest match of the  
26          output impedance to the load impedance for the additional driver; and

transferring an instruction to the additional driver to set the load matching  
28 impedance of the additional driver to the result of the method step of selecting the  
load matching impedance..

Claim 8 (Original):

The method as recited in claim 7, wherein the method step of obtaining the  
2 adjustable impedance is performed via a compensation circuit, wherein the  
compensation circuit is capable of performing the method step of obtaining the  
4 adjustable impedance for the preselected conducting traces.

Claim 9 (Original):

9. The method as recited in claim 7, wherein the adjustable impedance for at least  
2 one of the drivers comprises a plurality of field effect transistors, wherein the  
field effect transistors have capability of being individually turned on and turned  
4 off.

Claim 10 (Currently Amended):

~~The method as recited in claim 1, further comprising the method steps of A  
2 method for matching output impedance of a driver to a load impedance,  
comprising:~~

4 ~~attaching an external impedance between an external contact and a first source  
6 potential, wherein the load impedance comprises the external impedance plus  
impedance of interconnections between an output terminal of the driver and the  
8 external impedance;~~

10 ~~attaching an adjustable impedance between a second source potential and the  
output terminal of the driver;~~

12 ~~obtaining a reference potential, wherein the reference potential has a value half-  
14 way between the first source potential and the second source potential;~~

16           obtaining a load matching impedance by changing the adjustable impedance until  
18           the absolute value of the difference between voltage of the output terminal of the  
20           driver and the reference potential is less than a preselected value;

18  
20           based on the conducting trace length to width ratio of the driver and on the  
22           conducting trace length to width ratio of an additional driver, computing the load  
              matching impedance which provides the closest match of the output impedance  
              to the load impedance for the additional driver; and

24           transferring an instruction to the additional driver to set the load matching  
26           impedance of the additional driver to the result of the method step of computing  
              the load matching impedance.

Claim 11 (Original):

2           The method as recited in claim 10, wherein the method step of obtaining the  
4           adjustable impedance is performed via a compensation circuit, wherein the  
              compensation circuit is capable of performing the method step of obtaining the  
              adjustable impedance for the preselected conducting traces.

Claim 12 (Original):

2           The method as recited in claim 10, wherein the adjustable impedance for at least  
4           one of the drivers comprises a plurality of field effect transistors, wherein the  
              field effect transistors have capability of being individually turned on and turned  
              off.

Claims 13-17 (Cancelled):

Claim 18 (Currently Amended):

2           The ~~electronic circuit as recited in claim 13, further comprising~~ An electronic  
              circuit for matching output impedance of a driver to a load impedance,  
              comprising:

4                   an external impedance attached between an external contact and a first source  
5                   potential, wherein the load impedance comprises the external impedance plus  
6                   impedance of interconnections between an output terminal of the driver and the  
7                   external impedance;

8                   an adjustable impedance attached between a second source potential and the  
9                   output terminal of the driver;

10                  a reference potential source, wherein the reference potential obtained from the  
11                  reference potential source has a value substantially half-way between the first  
12                  source potential and the second source potential and wherein a load matching  
13                  impedance is obtainable by changing the adjustable impedance until the absolute  
14                  value of the difference between voltage of the output terminal of the driver and  
15                  the reference potential is less than a preselected value; and

16                  a compensation circuit, wherein the compensation circuit comprises a comparator  
17                  having a first input, a second input, and an output, wherein the compensation  
18                  circuit comprises a control circuit, wherein the first input of the comparator is  
19                  connected to the output terminal of the driver and the second input of the  
20                  comparator is connected to the reference potential source, wherein the output of  
21                  the comparator is attached to an input of the control circuit, wherein, for a  
22                  plurality of conducting traces having different length to width ratios, the control  
23                  circuit is capable of changing the adjustable impedance until the absolute value  
24                  of the difference between the potential of the output terminal of the driver and the  
25                  reference potential is less than a preselected value, wherein the compensation  
26                  circuit is connected to at least one additional driver, wherein the compensation  
27                  circuit is capable of selecting the adjustable impedance which provides the closest  
28                  match of the output impedance of the additional driver to the load impedance for  
29                  the additional driver based on the conducting trace length to width ratio of the  
30                  additional driver, and wherein the compensation circuit is capable of instructing  
31                  the additional driver to set the load matching impedance of the additional driver

to the value of the selected adjustable impedance.

Claim 19 (Currently Amended):

2           The ~~electronic circuit as recited in claim 13, further comprising~~ An electronic  
circuit for matching output impedance of a driver to a load impedance,  
comprising:  
4  
6           an external impedance attached between an external contact and a first source  
potential, wherein the load impedance comprises the external impedance plus  
impedance of interconnections between an output terminal of the driver and the  
8           external impedance;  
10           an adjustable impedance attached between a second source potential and the  
output terminal of the driver;  
12  
14           a reference potential source, wherein the reference potential obtained from the  
reference potential source has a value substantially half-way between the first  
16           source potential and the second source potential and wherein a load matching  
impedance is obtainable by changing the adjustable impedance until the absolute  
18           value of the difference between voltage of the output terminal of the driver and  
the reference potential is less than a preselected value; and  
20  
22           a compensation circuit, wherein the compensation circuit comprises a comparator  
having a first input, a second input, and an output, wherein the compensation  
24           circuit comprises a control circuit, wherein the first input of the comparator is  
connected to the output terminal of the driver and the second input of the  
26           comparator is connected to the reference potential source, wherein the output of  
the comparator is attached to an input of the control circuit, wherein, for a  
28           conducting trace having a known length to width ratio, the control circuit is  
capable of changing the adjustable impedance until the absolute value of the  
difference between the potential of the output terminal of the driver and the

reference potential is less than a preselected value, wherein the compensation  
30 circuit is connected to at least one additional driver, wherein the compensation  
circuit is capable of computing the adjustable impedance which provides a match  
32 of the output impedance of the additional driver to the load impedance for the  
additional driver based on the conducting trace length to width ratio of the  
34 additional driver, and wherein the compensation circuit is capable of instructing  
the additional driver to set the load matching impedance of the additional driver  
36 to the value of the selected adjustable impedance.

Claim 20 (Cancelled):